

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of)
)
Kaib et al.) Art Unit: **2145**
)
Application No. **09/427,811**) Examiner: **Mirza, Adnan M.**
)
Filing Date: **October 27, 1999**) Confirmation No. **3799**
)
For: **SYSTEM AND METHOD FOR SCHEDULING**)
HARVESTING OF PERSONAL INFORMATION)

APPEAL BRIEF

Mail Stop Appeal Brief - Patents

Commissioner for Patents
P.O. Box 1450
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Sir:

The Appellant submits this brief in connection with the above-identified patent application (hereinafter “Application”) and in response to the Notification of Non-Compliant Appeal Brief mailed May 22, 2007. In view of this brief, the Appellant respectfully requests reversal of the rejections and allowance of the pending claims.

(1) REAL PARTY IN INTEREST

The real party in interest is Yodlee, Inc., owner of the Application.

(2) RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences known to Appellant or the undersigned.

(3) STATUS OF CLAIMS ON APPEAL

Claims 1, 2, 4-9, and 16-37 stand finally rejected by the Examiner in a final Office Action mailed March 9, 2006 (“Office Action”). The rejection of claims 1, 2, 4-9, and 16-37 is being appealed.

(4) STATUS OF AMENDMENTS

No amendments have been filed subsequent to the final Office Action.

(5) SUMMARY OF THE INVENTION

Independent claim 1 recites a method for scheduling harvesting of information by a host computer from one or more information providers for one or more users, comprising the steps of (Application at page 4, lines 19-23; Abstract): (a) determining an update time for information stored by a selected information provider (Application at page 5, lines 7-9; page 5, lines 18-22; page 21, lines 12-19; page 22, lines 9-16; page 23, lines 8-9; page 23, lines 19-25; Abstract); (b) determining a set of end users whose information satisfies a condition for information update at the determined update time (Application at page 5, lines 8-9; page 20, line 20 to page 21, line 19; page 23, lines 8-17; page 23, lines 19-25; Abstract); (c) generating a predicted login time for each end user in the determined set of end users (Application at page 5, lines 9-12; page 6, lines 3-9; page 22, lines 1-8; Abstract); (d) sorting the determined set of end users according to the predicted login time generated for each end user in the determined set (Application at page 5, lines 12-14; page 22, line 20; page 23, line 5; Abstract); and (e) assigning a harvesting time for each end user based on each end user’s predicted login time (Application at page 5, lines 12-14; page 6, lines 10-13; Abstract).

Independent claim 20 recites a method for scheduling harvesting of personal information by a host computer from one or more information providers for one or more users, comprising

the steps of (Application at page 4, lines 19-23; Abstract): (a) determining an update time for personal information stored by a selected information provider (Application at page 5, lines 7-9; page 5, lines 18-22; page 21, lines 12-19; page 22, lines 9-16; page 23, lines 8-9; page 23, lines 19-25; Abstract); (b) determining a set of end users whose personal information satisfies a condition for information update at the determined update time (Application at page 5, lines 8-9; page 20, line 20 to page 21, line 19; page 23, lines 8-17; page 23, lines 19-25; Abstract); (c) generating a predicted login time for each user as a function of the end user's login time profile and a predetermined confidence threshold (Application at page 5, lines 9-12; page 6, lines 3-9; page 22, lines 1-8; Abstract); (d) sorting the determined set of end users according to the predicted login time generated for each end user in the determined set (Application at page 5, lines 12-14; page 22, line 20; page 23, line 5; Abstract); and (e) assigning a harvesting time for each end user based on each end user's predicted login time (Application at page 5, lines 12-14; page 6, lines 10-13; Abstract).

Independent claim 29 recites a method for scheduling harvesting of personal information by a host computer from one or more information providers for one or more users, comprising the steps of (Application at page 4, lines 19-23; Abstract): (a) determining an update time for personal information stored by a selected information provider (Application at page 5, lines 7-9; page 5, lines 18-22; page 21, lines 12-19; page 22, lines 9-16; page 23, lines 8-9; page 23, lines 19-25; Abstract); (b) determining a set of end users whose personal information satisfies a condition for information update at the determined update time (Application at page 5, lines 8-9; page 20, line 20 to page 21, line 19; page 23, lines 8-17; page 23, lines 19-25; Abstract); (c) generating a predicted login time for each end user in the determined set of end users (Application at page 5, lines 9-12; page 6, lines 3-9; page 22, lines 1-8; Abstract); (d) sorting the determined set of end users according to the predicted login time generated for each end user in the determined set (Application at page 5, lines 12-14; page 22, line 20; page 23, line 5; Abstract); and (e) assigning a harvesting time for each end user based on each end user's predicted login time, by performing the steps of (Application at page 5, lines 12-14; page 6, lines 10-13; Abstract): (i) determining the number of end users subject to harvesting over a specified time period (Application at page 5, lines 18-22; page 6, lines 13-25); (ii) determining a network activity curve of network activity associated with the host computer and the selected information provider (Application at page 6, lines 18-20); and (iii) assigning harvesting times for each end

user using the determined number of users and the network activity curve in order to optimize the network bandwidth used for harvesting (Application at page 6, lines 13-25).

(6) GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Whether claims 1, 4-9, 16-24, 26-29, and 31-37 are obvious over U.S.P.N. 6,243,755 to Takagi (“Takagi”) in view of U.S.P.N. 5,696,965 to Dedrick (“Dedrick”); and whether claims 2, 25, and 30 are obvious in view of Takagi, Dedrick, and U.S.P.N. 6,199,077 to O’Neil (“O’Neil”).

(7) ARGUMENTS

The claims do not stand or fall together. Instead, the Appellant presents separate arguments for various independent and dependent claims. Each of these arguments is separately argued below and is presented with separate headings.

A. Rejection of Claims 1, 2, 4-9, and 16-37 under 35 U.S.C. 103(a)

Claims 1, 4-9, 16-24, 26-29, and 31-37 stand rejected as obvious over Takagi in view of Dedrick, and claims 2, 25, and 30 stand rejected as obvious over Takagi, Dedrick, and O’Neil. Reversal of these rejections is respectfully requested for the reasons discussed below.

For a claim to be properly rejected under 35 U.S.C. 103, “[t]he PTO has the burden under section 103 to establish a prima facie case of obviousness.” In re Fine, 837 F.2d 1071, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). In order to maintain a prima facie case of obviousness under 35 U.S.C. 103(a), three criteria must be met. Specifically, the patent Examiner must show: (1) some suggestion or motivation in the prior art to combine reference teachings; (2) a reasonable expectation of success; and (3) the combination of references must teach or suggest all claim limitations. In re Dow Chemical Company, 837 F.2d 469 (Fed. Cir. 1988), and In re Vaeck, 947 F.2d 488 (Fed. Cir. 1991). To reject claims as obvious under 35 U.S.C. 103(a), the burden rests on the Examiner to establish all elements of the prima facie case. Unless the Examiner satisfies his burden of proving the prima facie case, claims may not be properly rejected as obvious.

For a proper obviousness rejection, the claimed invention must be considered as a whole. Hodosh v. Block Drug Co., Inc., 786 F.2d 1136, 1143 (Fed. Cir. 1986); M.P.E.P. § 2141. Each

reference must be considered as a whole, for the entirety of what it teaches, and references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention. Id. Further, when making an obviousness rejection, it is impermissible to use the claimed invention as an instruction manual or “template” to piece together the teachings of the prior art so that a claimed invention is rendered obvious. Interconnect Planning Corp. v. Feil, 774 F.2d 1132, 1138 (Fed. Cir. 1985). Specifically, it is impermissible to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts. The fact that references can be combined or modified is not sufficient to establish prima facie obviousness. In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990); M.P.E.P. § 2143.01. Also, an Examiner must support any motivation to combine argument with a convincing line of reasoning. Ex parte Clapp, 227 USPQ 972 (Bd. Pat. App. & Inter. 1985); M.P.E.P. § 2144.

Independent Claim 1

The Appellant requests reversal of the rejection of claim 1 for at least the reason that Takagi and Dedrick fail to disclose every element of claim 1, and for at least the reason that the Office Action fails to provide the required motivation to combine Takagi and Dedrick to arrive at the invention of claim 1.

Claim 1 recites a method for scheduling harvesting of information by a host computer from one or more information providers for one or more users, and includes the step of:

- (a) determining an update time for information stored by a selected information provider;

To support a rejection of claim 1, the Office Action alleges that Takagi discloses “(a) determining an update time for information stored by a selected information provider (col. 4, lines 52-63).”

The cited lines of Takagi disclose:

a computer usable medium having computer readable program code means embodied therein for causing a computer to function as a system for controlling an information transfer to a first information processing apparatus from a second information processing apparatus via a network, the computer readable program means including: first computer readable program code means for causing the computer to provide a first knowledge

concerning an activity schedule of a user using the-first information processing apparatus and a second knowledge concerning a relationship between a user's activity and an attribute of information; (Emphasis added).

Takagi relates to predicting information that will be required by a user using the user's activity schedule. Takagi at Col. 3, lines 40-46; Col. 3, lines 57-67; Col. 5, lines 9-20; and Col. 7, lines 36-41. The specification of Takagi provides examples of activity schedules and explains that an activity schedule is something that the user creates to describe what the user will be doing and at what time and place he will be doing it. Id.

In claim 1, an information provider stores information that is updated from time to time, and claim 1 recites a method to schedule harvesting of that information. To this end, step (a) of claim 1 recites determining the time at which information stored by an information provider is to be updated, such as, for example, determining when information at a financial institution is to be updated. In contrast, Takagi discloses predicting information that will be required by a user according to the user's activity schedule. The activity schedule of Takagi relates to the activity of a user, not to the time at which information at information provider is updated as recited in claim 1. Thus, the Appellant respectfully asserts that claim 1 is allowable for at least the reason that Takagi does not teach or disclose determining an update time for information stored by a selected information provider, as recited in claim 1.

With further regard to claim 1, the Office Action states that Takagi discloses "(b) determining a set of end users whose information satisfies a condition for information update at the determined update time; (col. 5, lines 9-20)."

Claim 1 recites in relevant part:

(b) determining a set of end users whose information satisfies a condition for information update at the determined update time;

Takagi at Col. 5, lines 9-24 discloses:

a computer usable medium having computer readable program code means embodied therein for causing a computer to function as a system for controlling an information transfer to a first information processing apparatus from a second information processing apparatus via a network, the computer readable program means including: first computer readable program code means for causing the computer to provide a knowledge concerning an activity schedule of a user using the first

information processing apparatus; second computer readable program code means for causing the computer to predict a necessary information which will be required by a user using the first information processing apparatus in future and a necessary time by which the necessary information will be actually required by the user, according to the knowledge concerning an activity schedule of the user;

As seen above, the cited language from Takagi relates to predicting information that will be required by a user according to the user's activity schedule. As discussed with respect to step (a) of claim 1, predicting information that will be required by a user using the user's activity schedule does not disclose determining an update time for information stored at an information provider. Similarly, predicated information that will be required by a user does not disclose determining a set of end users whose information satisfies a condition for information update, as recited in step (b). Accordingly, claim 1 is allowable for at least the reason that Takagi does not teach or disclose determining a set of end users whose information satisfies a condition for information update at the determined update time, as recited in claim 1.

In response to the Appellant's arguments regarding steps (a) and (b) of claim 1, the Examiner stated on page 6 of the Office Action mailed June 23, 2005, and on pages 6-7 of the Office Action, that:

Applicant argued, "determination of an update time for information stored by a selected information provider and the determination of an end user set based on the determined update time".

In the prior art Takagi disclosed, some past time can be determined as prescribed period of time (such as an hour) before a scheduled time that is recognized as current time according to the prediction rule. Also some future time is to be determined to contain at least next time zone in which the network can be utilized at low cost (col. 13, lines 7-15). The terminal and the information server changes depending on time and place. In addition depend on activity of the user, there may be long period of time during which terminal is connected to the network (col. 7, lines 36-41).

The cited language from Takagi discloses:

For instance, some past time can be determined as a prescribed period of time (such as one hour) before a scheduled time that is recognized as a current time according to the prediction rule (R-5) described below by the previous execution of the step S108. Also,

some future time is to be determined to contain at least the next time zone in which the network can be utilized at low cost. For instance, some future time can be determined as a time at which the user's activity of the day ends when it is possible to expect that the network can be utilized at low cost at a location where the user's activity of the day ends. (Takagi col. 13, lines 7-17) (Emphasis added).

The terminal 10 is a mobile terminal such as a portable terminal, for which the sub-network 31 to be used for a connection between the terminal 10 and the information server 40 changes depending on time and place. In addition, depending on an activity of the user, there may be a relatively long period of time during which the terminal 10 is not connected to the network 30. (Takagi col. 7, lines 36-41) (Emphasis added).

As seen above, the Examiner's reply cites to language of Takagi that relates to activity of a user. As discussed above, a user taking an action does not disclose an information provider updating its information as recited in step (a), nor does it disclose determining a set of end users whose information satisfies a condition for information updated at the determined time, as recited in step (b). Thus, the Appellant respectfully asserts that claim 1 is allowable for at least the reason that Takagi does not disclose steps (a) or (b) of claim 1.

To support a rejection of claim 1, the Office Action states that Takagi discloses “(c) generating a predicted login time for each end-user in the determined set of end users (col. 3, lines 40-46).”

Claim 1 recites in relevant part:

(c) generating a predicted login time for each end user in the determined set of end users;

Takagi at Col. 3, lines 40-46 discloses:

prediction means for predicting a necessary information which will be required by a user in future and a necessary time by which the necessary information will be actually required by the user, according to a first knowledge concerning an activity schedule of the user and a second knowledge concerning a relationship between a user's activity and an attribute of information; (Emphasis added).

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As an initial matter, it can be seen that Col. 3, lines 40-46 of Takagi discloses the same subject matter as the previously discussed citations to Takagi; namely, predicting information that will be required by a user according to the user's activity schedule. The Appellant respectfully submits that predicting a time at which information will be required by a user does not anticipate predicting a login time for a user as recited in step (c). One of skill in the art will recognize that a user who logs in may or may not subsequently request information. Further as discussed above, Takagi does not disclose determining a set of end users whose information satisfies a condition for information update, as recited in step (b). Accordingly, the Appellant asserts that claim 1 is allowable for at least the reason that Takagi does not disclose generating a predicted login time for each end user in the determined set of end users, as recited in step (c) of claim 1.

With further regard to claim 1, the Office Action states on page 2 that Takagi discloses “(d) sorting determined set of end users according to the predicted login time generated for each end user in the determined set (col. 3, lines 57-67).”

Claim 1 recites in relevant part:

(d) sorting the determined set of end users according to the predicted login time generated for each end user in the determined set; and

The cited language discloses:

prediction means for predicting a necessary information which will be required by a user using the first information processing apparatus in future and a necessary time by which the necessary information will be actually required by the user, according to a knowledge concerning an activity schedule of the user; and transfer control means for controlling the transfer of the necessary information from the second information processing apparatus to the first information processing apparatus via the network such that the necessary information will be transferred by the necessary time. (Emphasis added).

To support a rejection of step (d), the Examiner stated on page 6 of the Office Action mailed September 16, 2004, on page 6 of the Office Action mailed June 23, 2005, and on page 7 of the Office Action, that:

In the prior art Takagi disclosed Predicting a necessary information will be required by a user using the first information processing

apparatus in future and necessary information by which the necessary information which actually required by the user according to a knowledge concerning an activity schedule of the user" (col. 3, lines 52-67) that tends to be one of the functionality of the sorting. (Emphasis added).

To which the Appellant most recently responded:¹

The Examiner's citation to col. 3, lines 52-67 of Takagi is the same citation discussed above with regard to step (d) of claim 1. Accordingly, Applicants assert that the referenced language from Takagi nowhere discloses *sorting* or its equivalent to one of skill in the art. In an effort to move the application forward, the Applicants respectfully request that the Examiner clarify what is meant by the phrase "that tends to be one of the functionality of the sorting."

As seen above, the Examiner has repeatedly maintained that Takagi discloses step (d) of claim 1. The Appellant strenuously disagrees with the Examiner's conclusion for several reasons. First, the Appellant would like to emphasize that the cited language from Takagi clearly does not disclose sorting anything. Second, Takagi does not disclose the determined set of end users as recited in claim 1 and utilized in step (d).

Third, the rejection of step (d) does not allege a disclosure sufficient to anticipate step (d). To properly reject a claim under 35 U.S.C. 103, the Examiner must show that the cited reference(s) disclose each element of the claim at issue. The Examiner may show that an element is disclosed by a reference either expressly or inherently. In the present case, however, the Examiner applies a "tends to be one of the functionality" disclosure standard that clearly falls below the requirements for express or inherent disclosure. To clarify this issue, the Appellant has repeatedly asked the Examiner for further clarification regarding the rejection of claim (d), but has received none.

Thus, in view of the above, the Appellant asserts that claim 1 is allowable for at least the reason that Takagi does not teach or disclose sorting the determined set of end users according to the predicted login time generated for each end user in the determined set, as recited in step (d) of claim 1.

With further regard to claim 1, the Office Action states on pages 2-3 that:

¹ See pages 13-14 of the Amendment and Response to Office Action mailed December 20, 2005.

However Takagi failed to disclose assigning harvesting time for each end user. In the same field of endeavor Dedrick disclosed in one embodiment of the present invention, statistic compilation process 26 compiles electronic content-specific information for return to the metering server. This information includes, for example, how much time the end user spent consuming the electronic content and how much the content was consumed. For example, a particular advertisement may include ten different screens which are displayed to the end user (col. 7, lines 36-43).

Claim 1 recites in relevant part:

- (e) assigning a harvesting time for each end user based on each end user's predicted login time.

Dedrick at col. 7, lines 36-43 discloses:

In one embodiment of the present invention, statistic compilation process 26 compiles electronic content-specific information for return to the metering server 14. This information includes, for example, how much time the end user spent consuming the electronic content, and how much of the content was consumed. For example, a particular advertisement may include ten different screens which are displayed to the end user. (Emphasis added).

The Appellant strongly disagrees with the Examiner's analysis of step (e). First, step (e) recites assigning a harvesting time for each end user based on each end user's predicted login time. In contrast, the cited language discloses compiling content-specific information that includes how much time the end user spent consuming electronic content, such as information about advertisements displayed to the end user. Simply stated, compiling information about the number of advertisements displayed to the end user does not anticipate step (e), which relates to harvesting information that has been updated at an information provider. The Appellant has previously requested² clarification about the rejection of step (e), but, in response, the Examiner simply restated his rejection from the Office Action.³

In view of the above, the Appellant respectfully asserts that the cited references fail to disclose every element of claim 1 when steps (a)-(e) of claim 1 are properly viewed as a whole. Accordingly, the Appellant respectfully requests allowance of claim 1.

To support a rejection of claim 1, the Office Action states on page 3 that:

² Id. at pages 14-15.

³ See page 8 of the Office Action.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have incorporated the harvesting time based for each end user based on each end user's predicted login time as taught by Dedrick in the method of Takagi to make the network efficient in managing the user's profile.

The Office Action also states on page 7 that:

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. *See In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Takagi and Dedrick combine to make the network efficient in managing the user's profile. (Emphasis added).

The Appellant respectfully disagrees with the Examiner's reasoning.⁴ First, the Examiner has failed to show that a motivation exists to arrive at the invention of claim 1. Specifically, the Examiner asserts that a motivation exists to combine Takagi and Dedrick "to make the network more efficient in managing the user's profile." However, claim 1 plainly does not recite a user's profile, nor does it recite managing a user's profile. Second, as discussed above, Takagi and Dedrick do not disclose every element of claim 1, such that their combination cannot arrive at the invention of claim 1. Any such combination is therefore the result of impermissible hindsight reconstruction. Finally, there can be no reasonable expectation of success. Thus, claim 1 is allowable for at least the reason that the Office Action has failed to provide the required motivation to combine or expectation of success.

Dependent Claim 2

Claim 2 stands rejected as obvious over Takagi, Dedrick, and O'Neil. The Appellant respectfully asserts that claim 2 is allowable for at least the reason that the cited references fail to disclose every element of claim 2.

Claim 2 recites in relevant part:

⁴ See page 15 of the Amendment and Response to Office Action mailed December 20, 2005.

- (i) selecting end users configured to receive information from the selected information provider; and
- (ii) eliminating end users not configured to receive information subject to update at the determined update time.

The Office Action states on page 5 that:

In the same field of endeavor O’Neil disclosed the objects models focuses on the user’s view objects in E-metro. This object model provides a detailed description of how objects behave and how they relate to each other at user level. In some cases the objects and classes at the user level will not map to an object or class in the target programming language. However, the transition from OOA object to OOD objects is, for the most part, very smooth.

The object oriented Booch notation is employed in diagrams of this document as means to communicate relationships of objects visually (col. 49, lines 51-64). (Emphasis added).

The cited language from O’Neil discloses:

This section describes the object model of a cyber-community based personal and private information protection and brokerage system called "E-Metro." The object model focuses on the user's view of objects in E-Metro. This object model provides a detailed description of how objects behave and how they relate to each other at the user level. In some cases the objects and classes at the user level will not map to an object or class in the target programming language. However, the transition from OOA objects to OOD objects is, for the most part, very smooth. The object oriented Booch notation is employed in the diagrams of this document as a means to communicate relationships of objects visually. FIG. 23 depicts the basic notational symbols used and their meaning. The "uses for implementation" symbol is largely used for instance variables to denote that a Class needs the object in its implementation.

The cited language from O’Neil discusses object oriented modeling and programming.

Claim 2 recites selecting end users configured to receive information from the selected information provider, and eliminating end users not configured to receive information subject to update at the determined update time. The Appellant strongly traverses the rejection of claim 2 because the cited language clearly has nothing to do with claim 2. An assertion that “object oriented Booch notation is employed in diagrams” or the like discloses the subject matter of claim 2 is nonsensical.

The Appellant sought clarification of the Examiner's rejection using O'Neil.⁵ The Examiner did not reply. Thus, the Appellant asserts that claim 2 is allowable for at least the reason that the cited references fail to disclose every element of claim 2. Claim 2 is also allowable for at least the reason that it depends from allowable claim 1.

Dependent Claim 4

Regarding claim 4, the Office Action on page 3 states:

As per claim 4 Dedrick disclosed wherein the step of sorting the determined set of end-users comprises sorting the determined set in ascending order of predicted login time (col. 10, lines 43-45).

Claim 4 recites:

The method of claim 1, wherein the step of sorting the determined set of end users comprises sorting the determined set in ascending order of predicted login time.

The cited language discloses:

The transaction database 32 contains the end user's account along with a log of the transaction, including the price of the transaction.

The Appellant strenuously asserts that reference to a "user's account" or a "log of the transaction" clearly fails to teach or disclose sorting the determined set of end users in ascending order of predicted login time, as recited in claim 4. The cited language simply makes no reference to a login time, sorting, sorting in order of login time, or the determined set of end users. Thus, claim 4 is allowable for at least the reason that the cited references fail to disclose every element of claim 4. Claim 4 is also allowable for at least the reason that it depends from an allowable claim.

Dependent Claim 5

Claim 5 stands rejected as obvious over Takagi in view of Dedrick. Claim 5 further defines a method for generating predicted login times for users, and is composed of several steps. Thus, each step is addressed in turn.

⁵ Id. at page 16.

Claim 5 recites in relevant part:

- (i) for each end user, determining whether a login time profile associated with the end user meets a predetermined confidence threshold;

The Office Action alleges that Dedrick at Col. 10, lines 53-65 discloses step (i). The cited language from Dedrick discloses:

Thus, the metering server 14 contains an account balance, a user identification (such as an account number or a name), and may also include information indicating which information the user subscribes to. User profile data requested by metering server 14 from the client systems 12 is stored in user profile database 30, along with user profile data corresponding to electronic information being consumed by an end user. As discussed above, this user profile data does not specifically identify the individual end user. The account balance and user identification is contained in the transaction database 32. Therefore, the only information which is contained in the metering server which identifies an individual end user is that user's identification and an account balance, thereby maintaining the user's privacy.

The above-cited language fails to disclose determining whether a login time profile associated with the end user meets a predetermined confidence threshold, as recited in step (i). For example, there is clearly no reference to a predetermined confidence threshold as recited in claim 5.

Step (ii) of claim 5 recites:

for each end user whose login time profile does not meet the predetermined confidence threshold, assigning a predicted login time corresponding to the present day and time; and

The Office Action states that Takagi discloses step (ii) at Col. 15, lines 59-67 and Col. 16, lines 1-8. The cited language from Takagi discloses:

Outline: The activity/work is predicted from the user's habit for the work related to the task in the action list.

Triggering condition: A change in task and amount of remaining work.

Input: Date and time, activity/work, deadline, task, and amount of remaining work at a time of prediction.

Output: Activity/work and possibility.

Processing content: Assume that the habit of the user is that a possibility for carrying out the work related to the task while moving becomes high as the deadline approaches in view of the amount of remaining work for the task. Then, when a value in which an available work time obtained by subtracting the date and time of prediction from the deadline of a certain task is divided by the amount of remaining work is greater than threshold A, B, or C ($A>B>C$), set large, medium, or small possibility for carrying out the work related to that task as the activity/work, respectively. (Emphasis added).

The above-cited language discloses the words “triggering condition” and “threshold”; however, these words do not disclose step (ii) of claim 5.

First, as discussed above, none of the cited references disclose predicting the login time of a user as recited in step (ii) of claim 5. Second, the cited language clearly makes no reference to a login time profile meeting a predetermined confidence threshold, as recited in step (ii) of claim 5. Step (iii) is not anticipated for the same reasons. Accordingly, the Appellant asserts that claim 5 is allowable over the cited references. Claim 5 is also allowable for at least the reason that it depends from an allowable claim.

Dependent Claim 6

Claim 6 recites the method of claim 1 further comprising the step of shifting each end user's predicted login time back a predetermined time interval. To support a rejection of claim 6, the Office Action on page 3 states:

As per claim 6 Takagi disclosed the method of claim 1, and further comprising the step of shifting each end user's predicted login time back to a predetermined time interval (col. 13, lines 5-20). Delay can be considered as shifting and user's activity start and end is same as user's login and logout.

The cited language discloses:

Here, some past time is to be determined as a margin for a case where the user's actual activity delays from the activity schedule. For instance, some past time can be determined as a prescribed period of time (such as one hour) before a scheduled time that is recognized as a current time according to the prediction rule (R-5) described below by the previous execution of the step S108. Also, some future time is to be determined to contain at least the next

time zone in which the network can be utilized at low cost. For instance, some future time can be determined as a time at which the user's activity of the day ends when it is possible to expect that the network can be utilized at low cost at a location where the user's activity of the day ends. At the time after the user's activity of the day is ended, some future time should be set as a time by which the user's activity is scheduled to end next day in this case. (Emphasis added).

The Examiner again cites to language related to predicting information required by a user according to an activity schedule. The Appellant would like to point out that claim 1, from which claim 6 depends, relates to harvesting information that is updated at an information provider. Thus, the Appellant respectfully asserts that claim 6 is allowable for at least the reason that Takagi does not teach or disclose shifting each end user's predicted login time back a predetermined time interval, as recited in claim 6. Claim 6 is also allowable for at least the reason that it depends from allowable claim 1.

Dependent Claim 7

Claim 7 recites the method of claim 6, wherein the step of assigning a harvest time comprises assigning a harvest time for each end user corresponding to his shifted login time. Thus, claim 7 is allowable for at least the reason that it depends from allowable claim 6. Claim 7 is also allowable for at least the reason that the cited language, namely Takagi at Col. 12, lines 57-63 and Col. 13, lines 5-21, relates to predicting information required by a user according to an activity schedule, and does not teach or disclose assigning a harvest time for each end user as recited in claim 7.

Dependent Claim 8

Claim 8 stands rejected as obvious over Takagi in view of Dedrick, and further defines step (e) of claim 1, which is drawn to assigning a harvest time for a user based on a predicted login time. Claim 8 recites several steps, and each step is discussed in turn.

Step (i) of claim 8 recites:

performing a distribution fit across time to generate a polynomial function that allows determination of the number of end users subject to harvesting over a specified time period; (Emphasis added)

The Office Action asserts that step (i) of claim 8 is disclosed by Dedrick at Col. 7, lines 36-56, which discloses:

In one embodiment of the present invention, statistic compilation process 26 compiles electronic content-specific information for return to the metering server 14. This information includes, for example, how much time the end user spent consuming the electronic content, and how much of the content was consumed. For example, a particular advertisement may include ten different screens which are displayed to the end user. If the end user spends 15 seconds viewing the first screen and 15 seconds viewing the second screen and then terminates the advertisement, the statistic compilation process 26 transfers information to the metering server 14 indicating that an individual with this end user's user profile data spent 30 seconds viewing the electronic information and that the content was 20 percent consumed (that is, two screens out of ten were consumed). Additionally, information indicating the specific elements of the advertisements that were consumed (for example, the first two screens) is also transferred to the advertiser. Note that, as discussed above, this aggregate information does not reveal the identity of the end user who consumed the advertisement. (Emphasis added).

The above-quoted language from Dedrick discloses compiling information about what content a user has consumed, such as information about viewed advertising content. The Appellant respectfully asserts that compiling content-specific information as disclosed by Dedrick in no way discloses or is relevant to performing a distribution fit across time to generate a polynomial function as recited in claim 8.

The Appellant previously raised its concerns regarding the Examiner's citation to Dedrick.⁶ However, the Examiner provided no discussion in the Office Action as to how compiling content-specific information, as recited in Dedrick, in any way discloses a distribution fit across time, generating a polynomial function, or performing a distribution fit across time to generate a polynomial function as recited in step (i). The Appellant believes no such response is possible because the cited language clearly fails to anticipate step (i). Thus, claim 8 is allowable for at least the reason that the cited language from Dedrick does not teach or disclose step (i) of claim 8.

⁶ Id. at pages 20-21.

Step (ii) of claim 8 recites:

determining a network activity curve of network activity associated with the host computer and the selected information provider;

The Office Action asserts on page 4 that step (ii) of claim 8 is disclosed by Takagi at Col. 27, lines 5-64. Due to the size of the citation, it is not reproduced herein. Unfortunately, the Office Action does not state which part or parts of the 59 line citation disclose determining a network activity curve of network activity associated with the host computer and the selected information provider, as recited in claim 8. Upon review, the Appellant asserts that the citation does not disclose step (ii), because, for example, Takagi does not disclose the information provider recited in claim 1.

The Appellant previously expressed concern about the lengthy citation to Dedrick, and requested clarification from the Examiner.⁷ The Examiner replied that:⁸

In the prior art Takagi disclosed calculating a correlation by including the past statistical data. Where the past statistical data is linked to the user activity that is one the web that comes under the umbrella of networking (col. 26, lines 54-67). When a correlation exceeds certain value, additional register utilization prediction knowledge, and its triggering condition to the prediction knowledge triggering table (col. 27, lines 15-26). (Emphasis added).

The Appellant maintains its reasoning in view of the Examiner's reply. First, the Examiner's reply regarding Dedrick is unclear. Specifically, the Examiner does not explain how coming "under the umbrella of networking", "additional register utilization predication", or a "knowledge triggering table" anticipates any step of claim 8. Second, assuming arguendo that the Examiner's characterization of Dedrick is true, the cited language from Dedrick still plainly fails to disclose any step of claim 8. Thus, the Appellant asserts that claim 8 is allowable for at least the reason that the cited language from Dedrick fails to disclose step (ii) of claim 8.

The Examiner also alleges that Takagi at Col. 27, lines 5-64 discloses steps (iii) and (iv) of claim 8, which recite:

(iii) generating an inverse of the determined network activity curve;

⁷ Id. at page 21.

⁸ See page 7 of the Office Action.

(iv) performing an integral matching algorithm utilizing the generated polynomial function and the generated inverse of the network activity curve; and

Upon review, the Appellant respectfully asserts that Takagi at Col. 27, lines 5-64 does not disclose determining a network activity curve or generating an inverse of the determined network activity curve as recited in step (iii). Also, the cited language does not disclose performing an integral matching algorithm utilizing the generated polynomial function and the generated inverse of the network activity curve, as recited in step (iv). Thus, claim 8 is allowable for at least the reason that the citation to Dedrick fails to disclose steps (iii) or (iv) of claim 8.

Finally, the Examiner assert that Dedrick at Col. 7, lines 36-56, which is reproduced above, discloses step (v) of claim 8. The Appellant respectfully disagrees, and believes that claim 8 is allowable for at least the reason that the citation to Dedrick fails to disclose assigning harvesting times for each end user to redistribute peak harvesting time towards time zero to flatten the distribution fit across time, as recited in claim 8.

In view of the Remarks above, the Appellant asserts that claim 8 is allowable for at least the reason that the cited references fail to anticipate every step of claim 8. Claim 8 is also allowable for at least the reason that it depends from allowable claim 1.

Dependent Claim 9

Claim 9 stands rejected as obvious in view of Takagi over Dedrick. Claim 9 depends from claim 1, to which it adds a step drawn to harvesting information for an end user at the assigned harvesting time. The Office Action alleges that Dedrick at Col. 7, lines 36-56, which is reproduced above with regard to claim 8, discloses claim 9.

The Appellant respectfully asserts that claim 9 is allowable for at least the reason that Dedrick at Col. 7, lines 36-56 does not teach or disclose harvesting information from an information provider at the time assigned to a user, wherein the user's harvesting time is based on the user's predicted login time, as recited in claim 9. Additionally, claim 9 is allowable for at least the reason that it depends from allowable claim 1.

Independent Claim 20

Claim 20 generally represents claim 1 combined with subject matter from claim 5. For example, claim 20 recites a step (c) of generating a predicted login time for each user as a function of the end user's login time profile and a predetermined confidence threshold. Accordingly, the Appellant respectfully asserts that claim 20 is allowable for at least the reasons given for the allowability of claim 1, as well as for the reasons given for the allowability of claim 5.

Dependent Claim 24

Claim 24 generally recites subject matter from claim 5. Accordingly, claim 24 is allowable for at least the reasons given for the allowability of claim 5. Claim 24 is also allowable for at least the reason that it depends from allowable claim 20.

Dependent Claim 25

Claim 25 generally recites subject matter from claim 2. Accordingly, claim 25 is allowable for at least the reasons given for the allowability of claim 2. Claim 25 is also allowable for at least the reason that it depends from allowable claim 20.

Dependent Claim 26

Claim 26 generally recites subject matter from claim 4. Accordingly, claim 26 is allowable for at least the reasons given for the allowability of claim 4. Claim 26 is also allowable for at least the reason that it depends from allowable claim 20.

Dependent Claim 27

Claim 27 generally recites subject matter from claim 9. Accordingly, claim 27 is allowable for at least the reasons given for the allowability of claim 9. Claim 27 is also allowable for at least the reason that it depends from allowable claim 20.

Dependent Claim 28

Claim 28 generally recites subject matter from claim 8. Accordingly, claim 28 is allowable for at least the reasons given for the allowability of claim 8. Claim 28 is also allowable for at least the reason that it depends from allowable claim 20.

Independent Claim 29

Claim 29 generally represents claim 1 combined with subject matter from claim 8. For example, claim 29 recites assigning a harvesting time for each end user based on each end user's predicted login time, by performing the steps of: i) determining the number of end users subject to harvesting over a specified time period; ii) determining a network activity curve of network activity associated with the host computer and the selected information provider; and iii) assigning harvesting times for each end user using the determined number of users and the network activity curve in order to optimize the network bandwidth used for harvesting. Accordingly, claim 29 is allowable for at least the reasons given for the allowability of claim 1, as well as for the reasons given for the allowability of claim 8.

Dependent Claim 30

Claim 30 generally recites subject matter from claim 2. Accordingly, claim 30 is allowable for at least the reasons given for the allowability of claim 2. Claim 30 is also allowable for at least the reason that it depends from allowable claim 29.

Dependent Claim 31

Claim 31 generally recites subject matter from claim 4. Accordingly, claim 31 is allowable for at least the reasons given for the allowability of claim 4. Claim 31 is also allowable for at least the reason that it depends from allowable claim 29.

Dependent Claim 32

Claim 32 generally recites subject matter from claim 9. Accordingly, claim 32 is allowable for at least the reasons given for the allowability of claim 9. Claim 32 is also allowable for at least the reason that it depends from allowable claim 29.

Dependent Claim 33

Claim 33 generally recites subject matter from claim 8. Accordingly, claim 33 is allowable for at least the reasons given for the allowability of claim 8. Claim 33 is also allowable for at least the reason that it depends from allowable claim 29.

Dependent Claim 34

Claim 34 generally recites subject matter from claim 5. Accordingly, claim 34 is allowable for at least the reasons given for the allowability of claim 5. Claim 34 is also allowable for at least the reason that it depends from allowable claim 29.

Dependent Claims 16-19, 21-23, and 35-37

Claims 16-19, 21-23, and 35-37 are allowable for at least the reason that each depends directly or indirectly from an allowable claim.

CONCLUSION

For at least the reasons above, the pending claims are believed to be patentable over the cited references. The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 14-0629.

Respectfully Submitted,

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(8) CLAIMS APPENDIX

1. (Previously Presented) A method for scheduling harvesting of information by a host computer from one or more information providers for one or more users, comprising the steps of:
 - (a) determining an update time for information stored by a selected information provider;
 - (b) determining a set of end users whose information satisfies a condition for information update at the determined update time;
 - (c) generating a predicted login time for each end user in the determined set of end users;
 - (d) sorting the determined set of end users according to the predicted login time generated for each end user in the determined set; and
 - (e) assigning a harvesting time for each end user based on each end user's predicted login time.
2. (Original) The method of claim 1, wherein the step of determining a set of end users comprises:
 - (i) selecting end users configured to receive information from the selected information provider; and
 - (ii) eliminating end users not configured to receive information subject to update at the determined update time.
3. (Canceled)
4. (Original) The method of claim 1, wherein the step of sorting the determined set of end users comprises sorting the determined set in ascending order of predicted login time.
5. (Original) The method of claim 1, wherein the step of generating a predicted login time for each end user in the determined set of end users comprises:
 - (i) for each end user, determining whether a login time profile associated with the end user meets a predetermined confidence threshold;

- (ii) for each end user whose login time profile does not meet the predetermined confidence threshold, assigning a predicted login time corresponding to the present day and time; and
- (iii) for each end user whose login time profile does meet the predetermined confidence threshold, assigning a predicted login time based on the end user's login time profile.

6. (Original) The method of claim 1, and further comprising the step of shifting each end user's predicted login time back a predetermined time interval.

7. (Original) The method of claim 6, wherein the step of assigning a harvest time comprises assigning a harvest time for each end user corresponding to his shifted login time.

8. (Original) The method of claim 1, wherein the step of assigning a harvest time comprises:

- (i) performing a distribution fit across time to generate a polynomial function that allows determination of the number of end users subject to harvesting over a specified time period;
- (ii) determining a network activity curve of network activity associated with the host computer and the selected information provider;
- (iii) generating an inverse of the determined network activity curve;
- (iv) performing an integral matching algorithm utilizing the generated polynomial function and the generated inverse of the network activity curve; and
- (v) assigning harvesting times for each end user to redistribute peak harvesting time towards time zero to flatten the distribution fit across time.

9. (Original) The method of claim 1, and further comprising the step of harvesting the information for each end user in the determined set of end user from the selected information provider at the harvesting time assigned to each end user.

Claims 10-15 (Canceled).

16. (Previously Presented) The method of claim 1, wherein information is personal information.
17. (Previously Presented) The method of claim 16, wherein personal information is personal financial information or personal communication information.
18. (Previously Presented) The method of claim 17, wherein personal financial information is information from at least one of billing information, financial account information, investment information, 401(k) information, benefits information, credit information, or mortgage information.
19. (Previously Presented) The method of claim 17, wherein personal communication information is information from at least one of an email message, voice message, or fax message.
20. (Previously Presented) A method for scheduling harvesting of personal information by a host computer from one or more information providers for one or more users, comprising the steps of:
 - (a) determining an update time for personal information stored by a selected information provider;
 - (b) determining a set of end users whose personal information satisfies a condition for information update at the determined update time;
 - (c) generating a predicted login time for each user as a function of the end user's login time profile and a predetermined confidence threshold;
 - (d) sorting the determined set of end users according to the predicted login time generated for each end user in the determined set; and
 - (e) assigning a harvesting time for each end user based on each end user's predicted login time.
21. (Previously Presented) The method of claim 20, wherein personal information is personal financial information or personal communication information.

22. (Previously Presented) The method of claim 21, wherein personal financial information is information from at least one of billing information, financial account information, investment information, 401(k) information, benefits information, credit information, or mortgage information.

23. (Previously Presented) The method of claim 21, wherein personal communication information is information from at least one of an email message, voice message, or fax message.

24. (Previously Presented) The method of claim 20, wherein the step of generating a predicted login time comprises the steps of:

- i) for each end user, determining whether a login time profile associated with the end user meets a predetermined confidence threshold;
- ii) for each end user whose login time profile does not meet the predetermined confidence threshold, generating a predicted login time from within a predetermined range of the present day and time; and
- iii) for each end user whose login time profile does meet the predetermined confidence threshold, generating a predicted login time based on the end user's login time profile.

25. (Previously Presented) The method of claim 20, wherein the step of determining a set of end users comprises:

- i) selecting end users configured to receive personal information from the selected information provider; and
- ii) eliminating end users not configured to receive personal information subject to update at the determined update time.

26. (Previously Presented) The method of claim 20, wherein the step of sorting the determined set of end users comprises sorting the determined set in ascending order of predicted login time.

27. (Previously Presented w) The method of claim 20, further comprising the step of harvesting the personal information for each end user in the determined set of end user from the selected information provider at the harvesting time assigned to each end user.

28. (Previously Presented) The method of claim 20, wherein the step of assigning a harvest time comprises:

- i) determining the number of end users subject to harvesting over a specified time period;
- ii) determining a network activity curve of network activity associated with the host computer and the selected information provider;
- iii) performing a matching algorithm utilizing the determined number of end users and the network activity curve; and
- iv) assigning harvesting times for each end user to redistribute peak harvesting times in order to minimize network utilization.

29. (Previously Presented) A method for scheduling harvesting of personal information by a host computer from one or more information providers for one or more users, comprising the steps of:

- (a) determining an update time for personal information stored by a selected information provider;
- (b) determining a set of end users whose personal information satisfies a condition for information update at the determined update time;
- (c) generating a predicted login time for each end user in the determined set of end users;
- (d) sorting the determined set of end users according to the predicted login time generated for each end user in the determined set; and
- (e) assigning a harvesting time for each end user based on each end user's predicted login time, by performing the steps of:
 - i) determining the number of end users subject to harvesting over a specified time period;

- ii) determining a network activity curve of network activity associated with the host computer and the selected information provider; and
- iii) assigning harvesting times for each end user using the determined number of users and the network activity curve in order to optimize the network bandwidth used for harvesting.

30. (Previously Presented) The method of claim 29, wherein the step of determining a set of end users comprises:

- i) selecting end users configured to receive personal information from the selected information provider; and
- ii) eliminating end users not configured to receive personal information subject to update at the determined update time.

31. (Previously Presented) The method of claim 29, wherein the step of sorting the determined set of end users comprises sorting the determined set in ascending order of predicted login time.

32. (Previously Presented) The method of claim 29, further comprising the step of harvesting the personal information for each end user in the determined set of end user from the selected information provider at the harvesting time assigned to each end user.

33. (Previously Presented) The method of claim 29, wherein the step of assigning a harvesting time comprises the steps of:

- i) performing a distribution fit across time to generate a polynomial function that allows determination of the number of end users subject to harvesting over a specified time period;
- ii) determining a network activity curve of network activity associated with the host computer and the selected information provider;
- iii) generating an inverse of the determined network activity curve;
- iv) performing an integral matching algorithm utilizing the generated polynomial function and the generated inverse of the network activity curve; and

- v) assigning harvesting times for each end user to redistribute peak harvesting time towards time zero to flatten the distribution fit across time.

34. (Previously Presented) The method of claim 29, wherein the step of generating a predicted login time comprises the steps of:

- i) for each end user, determining whether a login time profile associated with the end user meets a predetermined confidence threshold; and
- ii) for each end user, generating a predicted login time as a function of the end user's login time profile and confidence threshold.

35. (Previously Presented) The method of claim 29, wherein personal information is personal financial information or personal communication information.

36. (Previously Presented) The method of claim 35, wherein personal financial information is information from at least one of billing information, financial account information, investment information, 401(k) information, benefits information, credit information, or mortgage information.

37. (Previously Presented) The method of claim 35, wherein personal communication information is information from at least one of an email message, voice message, or fax message.

(9) EVIDENCE APPENDIX

None.

(10) RELATED PROCEEDINGS APPENDIX

None.